### EXHIBIT R-2, FY 2000 RDT&E,N BUDGET ITEM JUSTIFICATION SHEET

**DATE: February 1999** 

BUDGET ACTIVITY: 7 PROGRAM ELEMENT: 0207161N

PROGRAM ELEMENT TITLE: TACTICAL AIR INTERCEPT

(U) COST: (Dollars in Thousands)

Project Number & Title	FY 1998 <u>Budget</u>	FY 1999 Budget	FY 2000 Estimate	FY 2001 Estimate	FY 2002 Estimate	FY 2003 Estimate	FY 2004 Estimate	FY 2005 Estimate	To <u>Complete</u>	Total <u>Program</u>
E0457 AIM-9X	55,120	64,626	40,051	17,503	5,699	1,927	799	1,531	0	260,396
TOTAL	55,120	64,626	40,051	17,503	5,699	1,927	799	1,531	0	260,396

<sup>(</sup>U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The AIM-9X Sidewinder program is a joint USN/USAF effort to continue the evolutionary development of the AIM-9 missile. The AIM-9X is the long-term evolution of the AIM-9 that will provide a series of modifications to the AIM-9 improving seeker/guidance and kinematic performance and will be fielded in the post-2000 timeframe. Funding for AIM-9X activities beyond FY 1994 is provided equally by the USN and USAF. The test articles are engineering developmental assets for proving missile performance in support of the LRIP DAB decision.

EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET DATE: February 1999

BUDGET ACTIVITY: 7 PROGRAM ELEMENT: 0207161N PROJECT NUMBER: E0457

PROGRAM ELEMENT TITLE: TACTICAL AIR INTERCEPT PROJECT TITLE: AIM-9X

(U) COST: (Dollars in Thousands)

**PROJECT** 

NUMBER &	FY 1998	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005 T	0 1	ΓΟΤΑL
<u>TITLE</u>	<b>BUDGET</b>	<b>BUDGET</b>	<b>ESTIMATE</b>	<b>ESTIMATE</b>	<b>ESTIMATE</b>	<b>ESTIMATE</b>	<b>ESTIMATE</b>	<u>ESTIMATE</u> <u>C</u>	COMPLETE	PROGRAM PROGRAM
E0457 AIM-9X	55,120	64,626	40,051	17,503	5,699	1,927	799	1,531	0	260,396
RDT&E,N Articles		9	15	2						26

- (U) A. MISSION DESCRIPTION AND BUDGET ITEM JUSTIFICATION: The AIM-9X Sidewinder program is a joint USN/USAF effort to continue the evolutionary development of the AIM-9 missile. The AIM-9X is the long term evolution of the AIM-9 that will provide a series of modifications to the AIM-9 improving seeker/guidance and kinematic performance which will be fielded in the post-2000 timeframe. Funding for AIM-9X activities beyond FY 1994 is provided equally by the USN and USAF. The test articles are engineering developmental assets for proving missile performance in support of the LRIP DAB decision.
- (U) B. JUSTIFICATION FOR BUDGET ACTIVITY: This program is funded under OPERATIONAL SYSTEMS DEVELOPMENT because it encompasses engineering and manufacturing development for modifying existing, operational systems.
- (U) PROGRAM ACCOMPLISHMENTS AND PLANS:
  - 1. (U) FY 1998 ACCOMPLISHMENTS: (Navy Share Only)
    - (U) (\$34,216) Continued engineering manufacturing development (EMD), conducted Design Review II (DR II), flew Captive Test Units, and started delivery of safe separation vehicles for Developmental Test-IIB (DT-IIB).
    - (U) (\$7,590) Continued to provide aircraft interface information to EMD contractor to include available wind tunnel data.

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- (U) (\$9,552) Continued monitoring EMD contract, continued DT-IIA flight testing, complete DT-IIA within the fourth quarter, began preparations for DT-IIB, initiated DT-IIB, and provided consulting services support.
- (U) (\$1,980) Headquarters/field travel.
- (U) (\$1,782) Began digital upgrade modification to LAU-7 launcher.
- 2. FY 1999 PLAN: (Navy Share Only)
  - (U) (\$31,505) Continue EMD efforts.
  - (U) (\$9,110) Continue providing aircraft interface to the EMD contractor. Relate results of wind tunnel testing to missile/platform interface and compatibility efforts.
  - (U) (\$18,763) Continuation of EMD contractor monitoring, complete DT-IIB, start DT-IIC, begin Operational Test-IIA (OT-IIA), and provide consulting services support.
  - (U) (\$1,917) Headquarters/field travel.
  - (U) (\$2,770) Continue digital upgrade to LAU-7 launcher.
  - (U) (\$561) Portion of extramural program reserved for Small Business Innovation Research assessment in accordance with 15 USC 638.
- 3. FY 2000 PLAN: (Navy Share Only)
  - (U) (\$19,635) Continue EMD efforts.
  - (U) (\$1,320) Continue providing aircraft interface to the EMD contractor in support of OT-IIA, DT-IID and Operational Flight Program (OFP 15C).

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# EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET DATE: February 1999

BUDGET ACTIVITY: 7 PROGRAM ELEMENT: 0207161N PROJECT NUMBER: E0457
PROGRAM ELEMENT TITLE: TACTICAL AIR INTERCEPT PROJECT TITLE: AIM-9X

- (U) (\$17,346) Continue providing Government flight test support through implementation of OT-IIA and DT-IID and Government engineering support to the EMD activities and provide consulting services support.
- (U) (\$1,750) Headquarters/field travel.

### (U) B. PROGRAM CHANGE SUMMARY:

(U) FY 1999 President's Budget:	<u>FY 1998</u> 57,946	<u>FY 1999</u> 65,855	<u>FY 2000</u> 42,711
(U) Appropriated Value:	57,946	65,855	
(U) Adjustments from PRESBUDG:	-2,826	-1,229	-2,660
(U) FY 2000/2001 President's Budget Submit:	55,120	64,626	40,051

### EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET DATE: February 1999

BUDGET ACTIVITY: 7 PROGRAM ELEMENT: 0207161N PROJECT NUMBER: E0457
PROGRAM ELEMENT TITLE: TACTICAL AIR INTERCEPT PROJECT TITLE: AIM-9X

#### CHANGE SUMMARY EXPLANATION:

- (U) Funding: The FY 1998 reduction of -\$2,826 thousand is the result of \$2,174 thousand for reprogramming actions and \$652 thousand for SBIR transfer. The FY 1999 reduction of -\$1,229 thousand reflects a \$152 reduction for economic assessments, Contract Advisory and Assistance reduction of \$1011 and a -\$66 reduction for Civilian Personnel under execution. The FY 2000 net reduction of -\$2,660 thousand includes; -\$75 for minor pricing adjustments, -\$1,954 to transfer RDT&E for LAU-7 and F/A-18 Digital Wingtip modifications to the appropriate APN line, -\$582 inflation, -\$195 working capital fund reductions of -\$195 thousand and civilian pay rate increase of \$146.
- (U) Schedule: Test article delivery schedule revised to reflect EMD schedule changes. LRIP DAB revised to 3<sup>rd</sup> Qtr of FY 00 based on revised test schedule.
- (U) Technical: Not applicable.
- (U) C. OTHER PROGRAM FUNDING SUMMARY: (Dollars in thousands):

<u>APPN</u>	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004	FY 2005	COMPLETE
Qty	75	125	300	300	300	300	3,600
WPN	29,387	32,493	56,759	62,192	63,691	65,089	957,482

- (U) RELATED RDT&E:
  - (U) DA PE 0603715D (AIM-9 CONSOLIDATED PROGRAM)
  - (U) AF PE 0207161F (TACTICAL AIM MISSILE)

### EXHIBIT R-2a, FY 2000 RDT&E,N BUDGET PROJECT JUSTIFICATION SHEET DATE: February 1999

BUDGET ACTIVITY: 7 PROGRAM ELEMENT: 0207161N PROJECT NUMBER: E0457
PROGRAM ELEMENT TITLE: TACTICAL AIR INTERCEPT PROJECT TITLE: AIM-9X

(U) D. ACQUISITION STRATEGY: The Acquisition Decision Memorandum (ADM) dated December 3, 1996 approved program entry into Engineering and Manufacturing Development (E&MD). A contract with Hughes Aircraft Company for E&MD was awarded December 13, 1996. Retrofitting of components will extend the operational effectiveness of existing inventories at an affordable cost while continuing evolution of the AIM-9 series. The E&MD contract is a Cost Plus Incentive Fee/Award Fee. In December 1997, Hughes Missile Systems Company became Raytheon Missile Systems Company as a result of Raytheon's acquisition of Hughes.

### (U) E. SCHEDULE PROFILE:

(LI) Duo augus	FY 1998	FY 1999	FY 2000	TO COMPLETE		
	(U)Program Milestones			3Q/00 LRIP DAB	2Q/02 MSIII	
	(U)Engineering	00 00 11		00/00 TDD TEOLIEVAL	40/04 TDD (: :	
	Milestones	2Q DR II		2Q/00 TRR TECHEVAL	1Q/01 TRR for OPEVAL	
	(U)T&E Milestones	4Q/98-1Q/00 DT-IIB/C	4Q/99-1Q/00 OT-IIA	1Q/00-4Q/00 DT-IID	2Q/01-4Q/01 OT-IIB	
	Milestories	DT-IIB/C	OT-IIA	טוי-ווט	OT-IIB	
	(U)Contract Milestones			2Q/00 LRIP		

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#### EXHIBIT R-3, FY 2000 RDT&E,N COST ANALYSIS

BUDGET ACTIVITY: 7 PROGRAM ELEMENT: 0207161N PROJECT NUMBER: E0457

PROJECT TITLE: AIM-9X

DATE:

February 1999

	Contract	Performing	*Total		FY 1999		FY 2000			**Target
Cost Categories:	Method	Activity &	<b>Prior Yrs</b>	FY 1999	Award	FY 2000	Award	Cost to	Total	Value of
	& Type	<b>Location</b>	Cost	Cost	<b>Date</b>	Cost	<b>Date</b>	<b>Complete</b>	Cost	Contract
DEM/VAL		Hughes								
	C/CPIF	Tucson AZ	6,685	0		0		0	6,685	22,600
	C/CPIF	Raytheon Bedford MA	8,587	0		0		0	8,587	24,900
EMD	C/CPIF/AF	Hughes	56,509	27,949	OCT 98	16,313	OCT 99	10,281	111,052	193,500
		Tucson, AZ								
EMD Award Fee			5,250	3,556	NOV 99	3,322	NOV 00	1,768	13,896	27,792
Aircraft Integration	C/CPFF	McDonnell- Douglas St. Louis, Mo St.	13,967	9,110	OCT 98	1,320	OCT 99		24,397	
Engineering Services	WX	Louis, Mo NAWCWD, CL	26,237	17,393	NOV 98	17,373	NOV 99	10,684	72,916	
Miscellaneous I/H (Efforts <\$1.0M)	Various	Various	4,780	1,648	NOV 98	777	NOV 99	1,611	8,816	
LAU-7 Launcher	various	McDonnell- Douglas	1,782	2,770	110170	,,,	110133	1,011	4,552	
		St. Louis,Mo								
Contract (P <sup>3</sup> I)	TBD	TBD						2,404	2,404	2,404
Subtotal Product Development Remarks: Target Value of Contract for DEM/VAL, EMD and Award Fee includes Air Force Funding			123,797	63,655		39,105		26,748	253,305	
Support Costs included in Management										
Subtotal Support			0	0		0		0	0	

#### Remarks:

Award Fee is 12% of the Target Cost and is broken into four increments. The first award fee period was applied in July 1998.

\*FY95 and prior funded under P.E. 0603715D. FY96-98 funded under P.E. 0207161N. \*\*Target Value includes both Navy and Air Force Funding.

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# EXHIBIT R-3, FY 2000 RDT&E,N COST ANALYSIS

BUDGET ACTIVITY: 7 PROGRAM ELEMENT: 0207161N PROJECT NUMBER: E0457

PROJECT TITLE: AIM-9X

DATE:

February 1999

Cost Categories:	Contract Method <u>&amp; Type</u>	Performing Activity & <u>Location</u>	Total Prior Yrs <u>Cost</u>	FY 1999 <u>Cost</u>	FY 1999 Award <u>Date</u>	FY 2000 <u>Cost</u>	FY 2000 Award <u>Date</u>	Cost to Complete	Total <u>Cost</u>	Target Value of Contract
All costs for test and evaluation are included in product development										
Subtotal Test & Evaluation			0	0		0		0	0	
Remarks:										
Contract Engineering Support	ID/IQ, T&M	Endmark	2,750	1,000	Dec 98	500	Dec 99	0	4,250	4,250
0 0 11	TBD	Arlington, VA TBD				250	Dec 99	493	743	
Program Management Support	ID/IQ, T&M	NSM	1,088	383	Dec 98	200	200,,	.,,,	1,471	1,471
Travel		PMA 259 IPT	625	256		196		218	1,295	
Subtotal Management SBIR Assessment Remarks:			4,463	<b>1,639</b> 561		946		711	<b>7,759</b> 561	
Total Cost			128,260	64,626		40,051		27,459	260,396	

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